

4~12 Inch EZ 2 Valve Installation Instructions

Step 1: Pipe Preparation

1. Clean pipe down to base material. If pits or high points are present try to avoid them. If you can't, grinding may be required for an end result of a smooth pipe for optimum seal.
2. Check diameter of pipe and select proper gasket set.



Step 2: Measuring, Taping and Greasing

1. Using a gasket as a template mark where the valve will be sealing on the pipe.
2. Attach gearbox to appropriate ring. Attach Gear box ring snugly to pipe. Tighten set screws by hand until they touch the pipe, then turn them one quarter turn with the wrench.



3. Apply AVT food grade tape to the pipe, wrapping the pipe 3 times making sure the tape is free of major wrinkles. This step allows the valve body to rotate and seal on the pipe with ease.



4. Using AVT food grade lubricant, grease tape liberally. Grease the grooves of the top and bottom section of the valve body where the gaskets will be sealing. Insert gaskets and grease liberally.



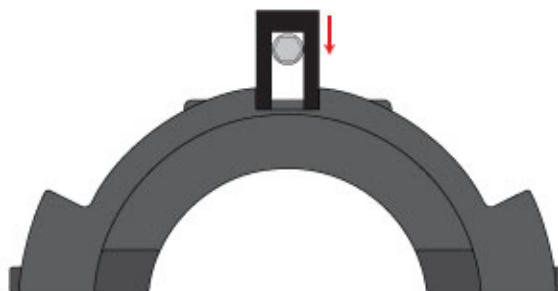
NOTE: USING ANY OTHER GREASE OR TAPE WILL VOID THE VALVE'S WARRANTY

Step 3: Mounting the Valve and Restraint Ring

1. Place top half of valve on pipe and carefully bolt bottom half of the valve body in place using the T-bolts that came with your valve.



2. Level valve and tighten bolts. **DO NOT** tighten valve body all the way down! Between a 1/4 (6MM) and 3/8 (9MM) inch gap is the standard.
3. Fit stop pin over slide gate feed screw and tighten set screws.
4. Level the valve then fit stop ring snugly against valve body. Using the U gauge align the ring with the stop pin. Tighten ring making sure the U gauge stays aligned with stop pin.



5. Attach chain to valve body using a restraint bold supplied with valve. Run the chain to the sprocket and down through the other side. Remove slack and feed chain back through the chain block. Lock chain in place and tighten.



Step 4: Pressure Testing

1. Using 15 mm ratchet, open slide gate and fill valve body with water. Close slide gate. To get a proper seal close slide gate fully and back off $\frac{1}{2}$ turn. Apply pressure to valve body $1 \frac{1}{2}$ times line pressure.
2. Blow off pressure. Open slide gate and remove test plug. Attach flush hose setup and flush hose.

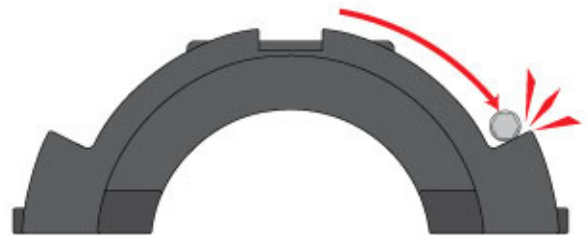


Step 5: Cutting

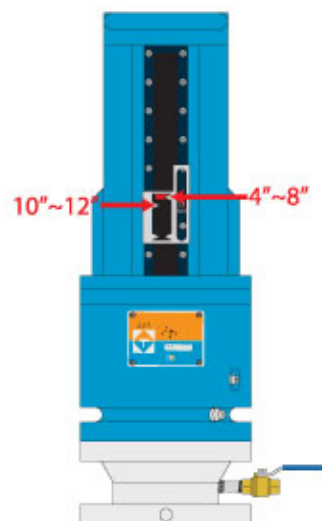
1. Attach mounting plate using bonnet bolts. Make sure the transition ring is flush against plate.
2. Check cutting teeth and attach cutter to mounting plate and secure.
NOTE: 4" (100MM) - 8" (200MM) use the 45MM cutter and 10" (250MM) and 12" (300MM) use the 60MM cutter.



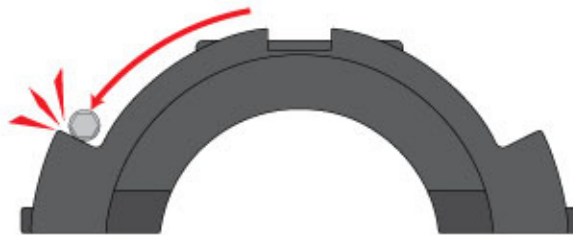
3. Rotate valve body down to one side until stop pin makes contact with ring.



4. Lower cutting head down to the pipe. Set the top arrow of travel gauge to the red depth indicator. The arrows with the longer travel range are for 4"-8" and the shorter travel range is for 10"-12". Back cutting head off of pipe and start motor. Slowly pierce pipe until the red depth indicator is in between the bottom arrows and lock feed with black knob.

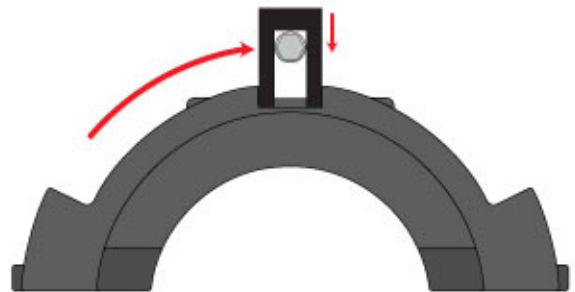


5. Slowly rotate valve from one side of the stop ring to the other.



7. Bring the cutting head all the way up and rotate valve body back up to center. Close flush hose.

8. Close slide gate and blow off pressure to cutting unit and remove. Remove mounting plate.



Step 6: Installing Bonnet and Finishing Up.

1. Attach bonnet and open slide gate. Lower gate $\frac{3}{4}$ the way down.



2. Remove chain, rings and stop pin.
3. Tighten valve down to 100 foot pounds of torque or metal to metal whichever comes first.
4. Install restraint bolts and tighten $\frac{1}{4}$ turn in a lug nut pattern. (Opposite sides tightened in succession).



5. Close valve the rest of the way down. This will cut off pressure to the valve body. Remove flush hose setup and plug hole with 1" plug for 4"-8", or 1 1/2" plug for 10"-12". (If you are not permitted to shut down temporarily, use completion plug tool by removing the coupling nipple from the blow off set up and attach completion plug tool. Open ball valve and push in rod and rotate clockwise. Once part is sealed blow off pressure and remove tool and ball valve. Attach cap.
6. Bring gate to the fully open position.

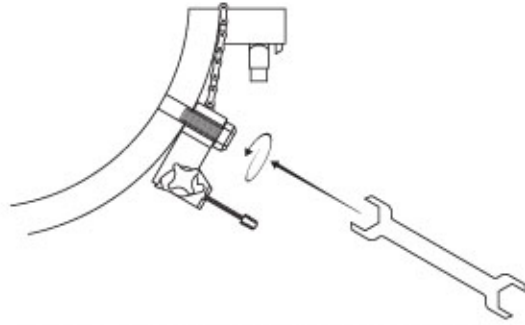


7. Congratulations you have completed your EZ2 Valve insertion!



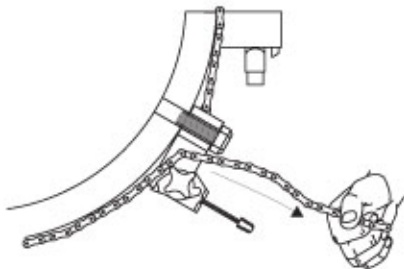
CHAIN DRIVE INSTRUCTIONS (4"~24"):

1.



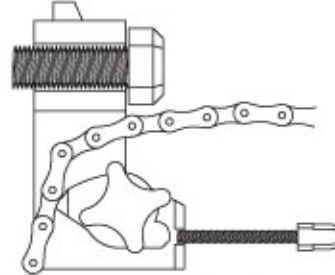
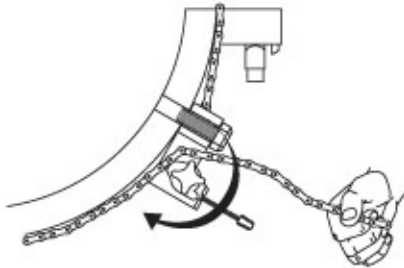
Use a restraint bolt to attach the chain drive unit to first restraint bolt hole on the lower half of the valve, on the opposite side of the cutting port.

2.



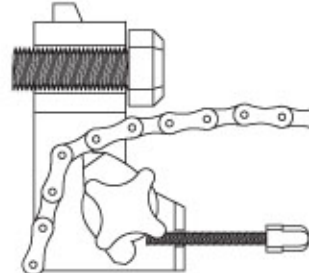
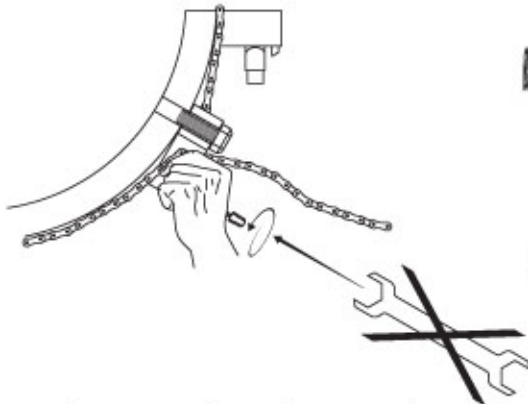
Pull the chain through the chain tensioner above (top) the cam making sure that the round end of the cam is facing out while the toothed "sharp" end is facing toward the valve.

3.



While keeping tension on the chain, rotate the cam so that the toothed end catches between two links. You may have to loosen it one or two links for the tooth to catch.

4.



Rotate the cam as far as it can go, then tighten the screw so that it presses against the round end which will tighten the chain and prevent any slipping. It is important that you **DO NOT USE A WRENCH** to tighten the screw, using a wrench can cause extra strain on the drive chain and on the gearbox.